

**ABSTRACT**

5 A pre-load weld fixture apparatus and method are disclosed, which  
include a stationary pivot block attached to a base, wherein the stationary  
pivot block is located adjacent to a nest for maintaining an object to be  
welded. Additionally a pivot arm is associated with a pivot arm insert, wherein  
the pivot arm rotates about a pivot point provided by a pin press component  
associated with the stationary pivot block, such that the pivot point is fixed to  
10 the stationary pivot block in relation to the object to be welded and wherein  
the pivot arm is positioned parallel to the nest. A spring block can be  
connected to the stationary pivot block, wherein the spring block provides  
tension to the pivot arm in order to permit a user to maintain the object upon  
the base with a desired tension for welding thereof. Finally, a torsion spring  
15 can be maintained by the spring block, wherein the torsion spring allows the  
spring block to provide tension to the pivot arm.